

REMARKS

Applicants add claims 7-14. Accordingly, claims 1-14 are all the claims pending in the application.

Claim rejections

Claims 1 and 2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Spiegel et al. (US 5,615,282, hereinafter “Spiegel”) in combination with Hasegawa et al. (US 6,856,410, hereinafter “Hasegawa”). Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Spiegel and Hasegawa as rejected in claim 2 in combination with Suzuki (US 7,034,964). Claims 4-6 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Spiegel, Hasegawa and Suzuki in combination with well-known principles in the art of image processing. Applicant traverses the rejections for at least the following reasons.

Claim 1

Claim 1 recites a gradation correction section which performs gradation correction processing so as to correct the CT image data and the LW image data received by the image reception section, independently of each other.

In the rejection of claim 1, the Examiner admits that Spiegel does not disclose a gradation correction section but asserts that Hasegawa discloses the feature missing in Spiegel.

Hasegawa is directed to printing postcards in which characters and images are combined with each other (column 1, lines 5-11). Character information is **character code**, position, size, typeface and color information (column 9, lines 15-16). Further, Hasegawa discloses that the character data and the image data are separated from the data of the image prepared in FIG. 2,

and processed by using respective LUTs (column 10, lines 38-40). However, Hasegawa does not disclose a gradation correction section which performs gradation correction processing so as to correct the CT image data and **the LW image data** received by the image reception section, independently of each other.

In particular, Hasegawa discloses separately processing the **character data** from the image data and does not disclose **LW image data** being processed using its respective LUT. FIG. 10 discloses an LUT for a character data but there is not disclosure found in Hasegawa of **LW image data**. The Examiner asserts that the left LUT in FIG. 2 (Applicant thinks the Examiner is referring FIG. 1) corresponds to an LUT for gradation correction processing of the LW image data (page 4, last line of the Office Action). However, FIG. 1 clearly illustrates that character information is fed into the left LUT and not LW image data which includes **line, character and graphics drawings**.

In view of the above, Applicant submits that there is no disclosure of LW image data in Hasegawa, and accordingly Hasegawa does not disclose a gradation correction section which performs gradation correction processing so as to correct the CT image data and the LW image data received by the image reception section, independently of each other.

Furthermore, Applicant submits that it would not have been obvious for one of ordinary skill in the art to modify the teachings of Spiegel with the teachings of Hasegawa at least for the following reasons.

Spiegel is directed to an image processing apparatus for converting and merging various color representations having different format into a single color image representation with a uniform format (column 6, lines 63-67). Spiegel discloses a CT (continuous tone) format and a

LW format (“line work”, “line art”, or “run length encoded”). In a CT format, the color and tone vary continuously in which each individual pixel are stored (column 1, lines 37-41). In an LW format, the color and tone vary only between sub regions and sequences of identical pixels along a particular row of the color image are stored as a single data element rather than being stored one by one (column 2, lines 1-12).

Spiegel discloses a spatial processing unit 14 which performs a **merging** function that “opens” the run length encoded representation of the image data (LW image data) to obtain pixel by pixel representation and modifies the pixels in the vicinity of the boundary between representation of the portion of the image (FIG. 1 and column 35, lines 1-4). In the above mentioned process, the spatial processing unit 14 converts the LW image data into CT image data and a selector 90 selects a value between the opened LW image data or scaled CT image as an output data (column 61, lines 40-45). Thus, rather than treating CT and LW independently Spiegel **teaches away** from claim 1 and thus also teaches away from any purported independent processing taught in Hasegawa.

Hasegawa is directed to a method of printing postcard in which characters and images are combined with each other. Hasegawa discloses separating the character data and the image data from the data of the image and processing the data using respective LUTs (column 10, lines 38-40).

Applicant submits that it would not have been obvious for one of ordinary skill in the art to modify the teachings of Spiegel with the teachings of Hasegawa because Spiegel discloses **converting and merging** plurality of image representation formats in to a **single image**

representation format while Hasegawa disclose **separating** the character data and image data from the data of the image and processing them using **two different LUTs**.

Moreover, since Spiegel discloses converting the different formats of image representation into a uniform representation (i.e. converting LW image data into CT image data), it would not be necessary to use different LUTs for color gradation as asserted by the Examiner because the image data is converted to be only represented in one format.

In view of the above, Applicant submits that claim 1 should be patentable over the references.

Claim 2

Claim 2 depends from claim 1, and therefore should be allowable by virtue of its dependency.

Claim 3

Applicant submits that since claim 3 depends from claim 1, and since Suzuki does not cure the deficiency noted above with respect to claim 1, claim 3 is allowable at least by virtue of its dependency.

Claim 4-6

Claim 4-6 recite subject matter analogous to claims 1-3, and therefore are allowable for at least the same reasons claims 1-3 are shown to be allowable.

New claims 7-14

Applicant submits that claim 7-14 depend from one of the independent claims that have been shown to be allowable, and therefore are allowable by virtue of their dependency.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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